

traction motor for application to the external electrical load.

22. (New) The system according to claim 21, wherein said switching device comprises a contactor.

23. (New) The system according to claim 21, further comprising:

a filter coupled to said switching device for minimizing noise in the diverted AC power input; and

a transformer coupled between said filter and the external electrical load.

24. (New) The system according to claim 21, further comprising:

a DC-to-DC converter coupled between said first electric machine and said first inverter for generating lower voltage DC electrical power from the DC electrical power produced by said first inverter;

an inverter coupled to said DC-to-DC inverter for converting the lower voltage DC electrical power to an AC power output for application to the external electrical load.

26. (New) The system according to claim 24, further comprising a second filter for minimizing noise in the AC power output.

27. (New) The system according to claim 24, wherein:  
said DC-to-DC converter is a two-way DC-to-DC converter;  
said inverter comprises a rectifier, and  
said system is operable in a charger mode..

28. (New) The system according to claim 27, further comprising means for selecting operation of said system in a generator mode versus the charger mode.

29. (New) A motor vehicle electrical power generating system for powering an electrical load external to the vehicle, comprising:

- an internal combustion engine;
- a battery;
- an electric generator coupled to said internal combustion engine for generating AC electrical power when said internal combustion engine is running;
- a generator inverter disposed between said electric generator and said battery for converting the AC electrical power generated by said electric generator to DC electrical power;
- a DC-to-DC converter coupled between said electric generator and said generator inverter for generating lower voltage DC electrical power from the DC electrical power produced by said generator inverter; and
- an inverter coupled to said DC-to-DC inverter for converting the lower voltage DC electrical power to an AC power output to power the external electrical load.

30. (New) The system according to claim 29, further comprising a second filter for minimizing noise in the AC power output.

31. (New) The system according to claim 29, wherein:  
said DC-to-DC converter is a two-way DC-to-DC converter;  
said inverter comprises a rectifier; and  
said system is operable in a charger mode.

32. (New) The system according to claim 31, further comprising means for selecting operation of said system in a generator mode versus the charger mode.